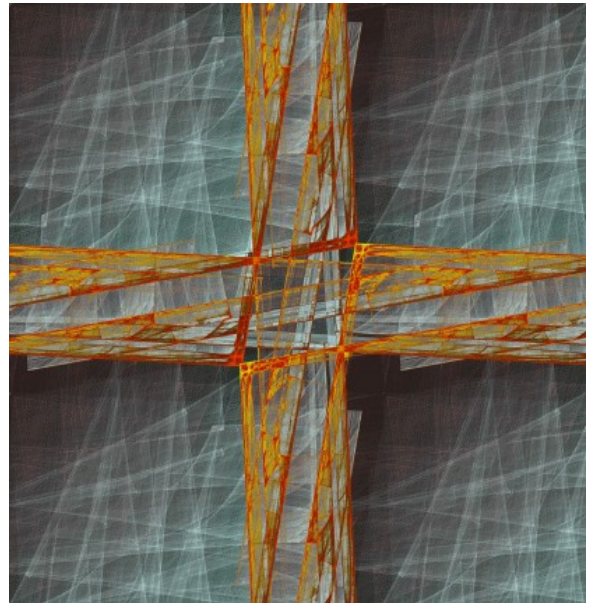


THE ART AND MATHEMATICS OF CHAOS - And how chaos can be (usefully) visualised

An LKL Maths-Art seminar
by Michael Field
Thursday 16 September 2010,
6.00–7.30pm
London Knowledge Lab,
WC1N 3QS

Michael Field's art work has developed out of mathematical interests in symmetry and chaotic dynamics. The presentation will start by describing (in non-technical terms) some of the background to his work and what he is trying to achieve. Aside from presenting examples of his pictures, he will indicate how he is trying to use mathematics as a tool in his art work – as opposed to giving artistic renditions of mathematical artifacts. This part of the presentation will also include one or two short movies. The speaker hopes to be able to bring several recently commissioned pictures (in “hard copy”) for the audience to view.

The remainder of the talk will be devoted to recent innovations motivated by the mathematical problem of describing the behaviour of a simplified model of the brain (interacting neurons). This mathematical work led him to use his “art” programs as a useful way of visualizing the data. Some of the visual results will be shown.



© Michael Field

Professor Michael Field grew up in England and gained his PhD and lectured in mathematics at the University of Warwick. In 1976 he moved to Sydney, Australia, where he stayed until 1992, when he moved to Houston, Texas. In 1988, he started using some of his work on symmetry and chaos to create patterns and designs. Early examples and explanations of this work appear in the book 'Symmetry in Chaos' (OUP, 1992, co-authored with Martin Golubitsky; an updated and revised edition appeared in 2009, published by SIAM). Michael has used his software and techniques as the basis for interdisciplinary courses for art students as well as seminars for teachers in Houston. His software and techniques are continually evolving, with new series of art works regularly exhibited internationally. A 2001 creation, “Armies of the Night”, is on permanent display at the London Knowledge Lab. Michael presented the first maths-art seminar at LKL in 2005, and we are very pleased to be able to welcome him back for a special visit.

All welcome. No registration or ticket required, but an email to lkl.maths.art@gmail.com is appreciated to assist with planning.

LKL Maths-Art seminar series

Website and archive: www.lkl.ac.uk/events/maths-art

This seminar is part of a regular series of maths-art seminars held at the London Knowledge Lab, on the second Thursday of each month from September to June. We also arrange special events from time to time. To receive email announcements about events, subscribe to the mailing list at: www.dcs.bbk.ac.uk/mailman/listinfo/lkl-maths-art.

We propose these seminars as explorations of the connections between "mathematics" and "art", where both terms are understood broadly: art implies visual art (painting, drawing, sculpture, computer graphics, video), architecture, music, textile art, literature/poetry (and others), and mathematics implies both mathematics as a discipline and the related disciplines in science and engineering for which mathematics is an essential means of expression and communication.

Next seminars – speakers to be confirmed: 14 October, 11 November, 9 December.

The seminar organisers are John Sharp and Phillip Kent. We welcome your suggestions about speakers or topics for future seminars; email us at lkl.maths.art@gmail.com.

Getting to the London Knowledge Lab

Nearest tube stations are: Holborn (Central, Piccadilly lines), Russell Square (Piccadilly line). Approximately 10-15 minutes walk from either station.

